

REMARKS

Claims 1 to 23 and 81 are pending. Claims 24 to 80 have been withdrawn from consideration.

§ 103 Rejections

Claims 1-4, 7-11, 17, 20-23, and 81 stand rejected under 35 USC § 103(a) as being unpatentable over U.S. Patent No. 6,325,515 to Coderre. Also, claims 12-16 and 18-19 stand rejected under 35 USC § 103(a) as being unpatentable over Coderre. The Examiner admits that “Coderre fails to teach that the cap-Y value of the pigmented layer is less than the cap-Y value of the retroreflective layer,” but asserts that “[i]t would have been obvious to one having ordinary skill in the art to provide the pigmented layer of Coderre to have a lower cap-Y value because of the presence of the pigments that lowers the reflectivity of the layer” (page 2 of February 10, 2006 Office action). The Examiner further states that “[a]s for the brightness value of the pigmented layer being less than that of the retroreflective layer, it would have been obvious because a pigmented layer would provide for less brightness than a retroreflective layer which would reflect more light” (page 3).

Claims 5 and 6 stand rejected under 35 USC § 103(a) as being unpatentable over U.S. Patent No. 4,983,436 to Bailey. The Examiner admits that Bailey “fails to teach that the cap-Y value of the pigmented layer is less than the cap-Y value of the retroreflective layer,” but asserts that “[i]t would have been obvious to one having ordinary skill in the art to provide the pigmented layer of Bailey to have a lower cap-Y value because of the presence of the pigments that lowers the reflectivity of the layer” (page 3).

In order to present a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. Applicant asserts that the

Examiner has not made a *prima facie* case of obviousness because (1) neither Coderre nor Bailey describe or suggest all of the claim elements of independent claim 1 and (2) there is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.

Independent claim 1 of the present application describes “a retroreflective layer having a first cap-Y value,” and a plurality of discrete pigmented indicia disposed on the viewing surface of the retroreflective layer, wherein “the pigmented indicia define a second cap-Y value . . . [that is] less than the first cap-Y value” (emphasis added). This difference in cap-Y value effects a reduction in “a coefficient of retroreflection and/or whiteness level of a reflective sheeting 10” so that the retroreflection or whiteness can be reduced in a controlled manner to a desired level” (page 13, lines 12-14)(emphasis added).

In contrast, Coderre describes increasing the cap-Y value (col. 3, lines 18-19; see also col. 1, lines 59-62, col. 1, lines 66-67, and col. 2, lines 3-6) by aligning the pigmented indicia with at least one of the sets of intersecting grooves “in order to enhance pigmentation for daytime viewing” (see, for example, col. 3, line 17 and col. 3, lines 19-26). Coderre’s goal of increasing the cap-Y value is accomplished by interposing a pigmented layer including pigmented indicia between a transparent film layer and a cube corner layer that includes cube corner elements bounded by at least two sets of intersecting grooves. Thus Coderre describes increasing the whiteness (or cap-Y) value of cube corner sheeting without substantially reducing retroreflectance of the sheeting (col. 1, lines 59-61). Thus Coderre teaches away from the recited elements of independent claim 1.

Also, the Examiner’s assertion that “[i]t would have been obvious to one having ordinary skill in the art to provide the pigmented layer of [Coderre or] Bailey to have a lower cap-Y value because of the presence of the pigments that lowers the reflectivity of the layer” is incorrect (pages 2 and 3). As stated on page 4, lines 16-18 of the present application, “‘brightness’ or ‘retroreflectivity’ are measured by a coefficient of retroreflection. Whiteness is measured by a ‘cap-Y’ scale.” Whiteness (measured by cap-Y) and retroreflectivity are different and are not linked. Thus a reduction in whiteness (or cap-Y) does not necessarily result in lower reflectivity. For example, TiO_2 is an opaque pigment that decreases reflectivity but increases cap-Y. Also, Coderre describes using pigments to increase the whiteness (or cap-Y) value of cube corner

sheeting without substantially reducing retroreflectance of the sheeting (page 2, lines 4-5). For this reason, applicant asserts that neither Coderre nor Bailey, alone or in combination with the knowledge generally available to one of ordinary skill in the art, render independent claim 1 obvious.

Applicant asserts that the Examiner has not made a *prima facie* case of obviousness for independent claim 1. Coderre teaches away from the recited claim elements rather than teaching or suggesting all of the claim elements. Further, neither Coderre nor Bailey contain any suggestion or motivation, either alone or in combination with the knowledge generally available to one of ordinary skill in the art, to be modified to achieve the claimed elements.

Claims 2-4, 7-11, 17, 20-23, and 81 each add additional features to claim 1. Claim 1 is patentable for the reasons given above. Thus, claims 2-4, 7-11, 17, 20-23, and 81 are likewise patentable. For these reasons, the rejections of claims 1-4, 7-11, 17, 20-23, and 81 under 35 USC § 103(a) as being unpatentable over Coderre and Bailey have been overcome and should be withdrawn.

In view of the above, it is submitted that the application is in condition for allowance. Reconsideration of the application is requested.

Respectfully submitted,

April 11, 2006
Date

By: Sandra K. Szczerbicki
Sandra K. Szczerbicki, Reg. No.: 53,666
Telephone No.: 651-733-1543

Office of Intellectual Property Counsel
3M Innovative Properties Company
Facsimile No.: 651-736-3833